material equivalent to the hull in strength and fatigue resistance.

(b) All valves used as shell fittings and all shell fittings on which such valves are mounted must be made of steel, or bronze or other ductile material approved by the Commandant.

§ 45.155 Inlets and discharge piping: Valves.

- (a) Except as provided in paragraphs (d) and (e) of this section each pipe that discharges overboard through the hull of the ship must have—
- (1) An automatic nonreturn valve with a positive means for closing; or
- (2) Two automatic nonreturn valves with the inboard valve accessible for examination in service.
- (b) The means for operating a valve described by paragraph (a)(1) of this section must be readily accessible and have indicators that show when the valve is not closed.
- (c) If the pipe discharges from a space that is not manned or does not have continuous bilge water monitoring, a valve described in paragraph (a)(1) of this section must be operable above the freeboard deck.
- (d) Each pipe that discharges from a space within an enclosed superstructure or deckhouse may have at least one accessible automatic nonreturn valve if the space is regularly visited by the crew.
- (e) Through-hull piping systems in machinery spaces may have valves with positive means for closing at the shell if the controls are readily accessible and have indicators showing when the valves are not closed (nonreturn valves are not required).

§ 45.157 Scuppers and gravity drains.

Scuppers and gravity deck drains from spaces above the freeboard deck that penetrate the shell below a line 24" or .05B above the summer loadline, whichever is greater, must have an automatic nonreturn valve. This valve may be omitted if the piping is of thickness not less than extra heavy pipe.

§45.159 Special conditions of assignment for type A vessels.

The lower freeboards allowed for type A vessels allow water on deck for

greater percentages of time. Therefore the following additional requirements must be met to qualify for type A freeboards:

- (a) Machinery casings must be protected by an enclosed superstructure or deckhouse unless intact bulkheads are used on all sides on the freeboard deck.
- (b) Exposed machinery casings may be fitted with weathertight doors providing they lead to a space or passageway as strong as an enclosed superstructure from which a second interior weathertight door is provided for access to the engine room.
- (c) Hatchways on the exposed freeboard or forecastle decks must be provided with watertight covers of steel.
- (d) Unless a separate fore and aft access is provided below the freeboard deck, a permanent fore and aft gangway must be fitted at the superstructure deck level between poop and all other deckhouses used in the essential operation of the vessel.
- (e) Type "A" vessels must be fitted with open rails for at least half the length of the exposed parts of the weather deck. Where superstructures are connected by trunks, open rails must be fitted for the whole length of the exposed parts of the freeboard deck

Subpart E—Unmanned River Service Dry Cargo Barges

Source: CGD 84–58, 50 FR 19533, May 9, 1985, unless otherwise noted.

§ 45.171 Purpose.

This subpart prescribes conditions under which certain unmanned river service dry cargo barges may be exempt from the load line and marking requirements. In lieu of these requirements, they are subject to special certification and operating requirements.

§45.173 Vessels subject to this subpart.

- (a) This subpart applies to a vessel that is— $\,$
- (1) An unmanned river service dry cargo barge with a length to depth ratio not to exceed 22 and built to at least the minimum scantlings of the American Bureau of Shipping River Rules:

§45.175

- (2) Operated on the Great Lakes on a voyage between Calumet Harbor, Chicago, Illinois and Burns Harbor, Indiana and intermediate ports on Lake Michigan:
- (3) Operated during fair weather condition only; and
- (4) Carrying only dry cargoes that have not been designated as hazardous under 46 CFR part 148 or 49 CFR subchapter C.

§45.175 Certification.

- (a) In order to be exempt from the load line and marking requirements of this part, the owner of a vessel must apply for exemption in writing to the Officer in Charge, Marine Inspection, Chicago, Illinois. The application may be in any form and must be signed by the owner or an officer authorized to represent the barge's owner. The mailing address is Commanding Officer, U.S. Coast Guard Marine Safety Office, 610 S. Canal Street, Chicago, Illinois, 60607. No form or certificate will be returned, however, the owner's certification will be kept on file at the Marine Safety Office, Chicago. The owner of a barge for which a load line exemption is in effect shall notify the OCMI, Chicago of the transfer of ownership, change of service, or other disposition of the barge.
- (b) The owner and operator of a vessel for which a load line exemption has been requested are responsible for maintaining the vessel and complying with the special operating requirements.
- (c) The application for exemption from the load line requirements must include the following general information:
 - (1) Barge name.
 - (2) Type.
 - (3) External dimensions.
 - (4) Types of Cargo.
- (5) Official Number or other classification numbers.
- (6) Owner and operator addresses and telephone numbers.
 - (7) Place and date built.
- (d) The application must state and certify compliance with the following:
- (1) The vessel has been designed and built to at least the minimum scantlings of the American Bureau of

Shipping River Rules which were in effect at the time of construction.

(2) The provisions of 46 CFR 45.177 will be complied with before and during all voyages between Calumet Harbor, Chicago, Illinois and Burns Harbor, Indiana and intermediate ports on Lake Michigan.

§ 45.177 Special operation requirements.

- (a) Before commencement of any voyage on Lake Michigan, the towboat operator shall ensure the following:
- (1) Deck and side shell plating must be free of visible holes, fractures or serious indentations as well as damage that would be considered in excess of normal wear and tear.
- (2) Cargo box side and end coamings must be watertight.
- (3) All manholes must remain covered and secured watertight.
- (b) During the voyage, all vessels subject to this subpart must meet the following minimum operating requirements in all seasons:
- (1) The vessel must be operated during fair weather conditions only.
- (2) The freeboard of the vessel must not be less than 24 inches.
- (3) The combined operating freeboard plus the height of cargo box coamings must be at least 54 inches.
- (4) The voyage must not be farther than 5 miles from a harbor of safe refuge between Calumet Harbor, Chicago Illinois and Burns Harbor, Indiana.
- (5) All void tanks must be kept free of excess water.

APPENDIX A TO PART 45—LOAD LINE CERTIFICATE FORM

GREAT LAKES LOAD LINE CERTIFICATE

No
Issued under the authority of the Com-
mandant, U.S. Coast Guard, United States of
America, under the provisions of the Act of
August 27, 1935, as amended to establish load
lines on the Great Lakes of North America
and the Load Line regulations in force on
, 19, By,
duly authorized by the Commandant to issue
said load line certificate.

Ship	
Certificate No.	
Official No	
Length (LBP)	
Gross tonnage _	
Port of registry	